BUREAU OF ENVIRONMENT
CONFERENCE REPORT

SUBJECT: NHDOT Monthly Natural Resource Agency Coordination Meeting
DATE OF CONFERENCE: December 18, 2019
LOCATION OF CONFERENCE: John O. Morton Building
ATTENDED BY:

NHDOT
Matt Urban
Sarah Large
Ron Crickard
Andrew O'Sullivan
Marc Laurin
Joseph Adams
Meli Dube
Tim Mallette
Michael Licciardi
Jennifer Reczek

ACOE
Mike Hicks

EPA
Mark Kern
Jeannie Brochi
Beth Alafat

US Coast Guard
*Jeffrey Stieb

US Fish & Wildlife Services
Susi von Oettingen

NHDES
Lori Sommer
Karl Benedict
Eben Lewis

NH Fish & Game
Carol Henderson
Brendan Clifford

NH NHB
Amy Lamb

Consultants/Public Participants
Pete Walker
Lindsey Matras
John Byatt
Kristen Hayden
Chris Fournier
Sarah Barnum
John Stockton
Dan Hageman
Stephanie Dyer-Carroll

*Attendee called in for Seabrook-Hampton, #15904

PRESENTATIONS/ PROJECTS REVIEWED THIS MONTH: *(minutes on subsequent pages)*

(When viewing these minutes online, click on a project to zoom to the minutes for that project.)

NOTES ON CONFERENCE:

Meeting Minutes
Finalized the August 21, 2019 meeting minutes. The group agreed to finalize the October 16, 2019 meeting minutes at the January 15, 2020 meeting. Postponed finalizing the November 20, 2019 meeting minutes.

Keene-Swanzey, #40100 (X-A004(345))
Pete Walker introduced the project, explaining that it seeks to identify an appropriate site to provide compensatory flood storage in Keene to offset four NHDOT construction contracts. These construction projects were completed from 2007-2017. Wetland mitigation was completed, but NHDOT has been unable to find an acceptable floodplain mitigation site. Pete presented the Project Purpose as follows:
Identify an appropriate floodplain mitigation site or sites, in consultation with the City of Keene and state and federal agencies, to provide 19.9 acre-feet of floodplain compensatory storage within the Ashuelot River watershed for four construction contracts:

- Contract 10309A: Base Hill Road Intersections with NH 9 and NH 10 (Completed 2007)
- Contract 10309H: NH 10/Winchester Street Roundabout (Completed 2008)
- Contract 10309O: West Street Improvements (Completed 2008)
- Contract 10309P: Multi-use trail over NH 12/101 (Completed 2017)

VHB is compiling a GIS database, from which a series of filters will be run to identify high priority floodplain mitigation sites in the City of Keene. Initial screening criteria will include:

- Minimum parcel size, most likely a 5-acre minimum parcel size, based on tax parcels;
- Geomorphic position relative to existing floodplain to find sites within or adjacent to the 100-year floodplain;
- Ownership and development status - Publicly-owned site preferred, but private sites not excluded; and
- At least 5 acres undeveloped.

Once the initial screening is completed, VHB will use LiDAR topographic data to estimate the maximum potential compensation flood storage volume for potential mitigation sites – likely up to eight (8) parcels. A total of four sites will be selected for field studies, which will include development of an existing conditions survey, wetland delineations, preliminary cultural resource reviews, rare species coordination, and possibly geotechnical surveys.

P. Walker mentioned to Amy Lamb about establishing a data-sharing agreement for NHB data for the City of Keene.

VHB will be looking for feedback from agencies and the City of Keene during the screening process. Conceptual designs will be developed for all four alternatives (i.e., 30% design - preliminary grading plan). An engineering report will be submitted in the fall, which would serve as an alternatives analysis document, identifying the most feasible floodplain mitigation site. A Categorical Exclusion NEPA document will likely be required. Public Informational Meetings will be held (first one on January 21, 2020), and, if required, a public hearing.

Meeting attendees identified some confusion about whether these four projects requiring floodplain mitigation were complete already or are being proposed for construction. P. Walker confirmed that they have already been constructed. Mark Kern and Tim Mallette asked if the wetlands mitigation has already been completed for the project. P. Walker explained that permits were previously obtained for these projects, most of which were obtained in 1999. Marc Laurin recalled an ARM Fund payment was used for wetlands mitigation for the 10309P project and preservation was identified as mitigation for the other

projects at that time, but would look up the supporting information and email to meeting attendees or bring the information to the next meeting.

Lori Sommer asked if floodplain mitigation uses a 1:1 ratio of impact area to mitigation area; P. Walker and Mike Hicks confirmed, per Executive Order. Pete mentioned that the project will consider the Keene Floodplain Ordinance as well, which has some additional criteria.

L. Sommer asked if the selection criteria considered developed sites, since some of the businesses on developed sites are closed. P. Walker clarified that developed sites will not be excluded, but sites that are currently undeveloped or are largely undeveloped will be preferred. L. Sommer asked if wetlands would be constructed as part of the floodplain mitigation. P. Walker explained that wetlands may be developed indirectly but the end goal is to create flood storage areas on the site (excavation would occur to create the storage).

Beth Alafat asked if the floodplain mitigation process would improve existing problems with the City of Keene's stormwater system. P. Walker responded that while stormwater is part of bigger flooding issue in Keene, the City of Keene doesn't have the funding to fully implement all the stormwater retrofits needed to control urban flooding in the City. P. Walker asked if finding a floodplain mitigation site for 20-acre feet of floodplain storage proved difficult, would the agencies be open to stormwater retrofit instead of creation of a specific compensatory storage site? Agency responses for L. Sommer and M. Kern indicated that this would be considered, however it may be difficult to clearly demonstrate the floodplain mitigation benefit of a stormwater project.

Karl Benedict mentioned the new wetland rules require no impacts to stormwater volume, and recommend referring to that rule once the project develops further. If wetlands are impacted during the creation of flood storage, the new stormwater rule would be applied during the permitting process.

A. Lamb requested that the screening process give preference to non-forested areas. There are concerns with using a forested site with a high water table as floodplain mitigation. P. Walker confirmed that it is unlikely that a mature forested site would be used for floodplain storage.

L. Sommer recommended Monadnock Conservancy as an environmental partner in Keene (contacts being Ryan Owens and Anne McBride) to connect with landowners in the area or identify potential mitigation parcels.

P. Walker mentioned that if floodplain excavation was conducted a wetland seed mix would likely be used. L. Sommer expressed concerns about invasive species if excavation occurred; creation of the floodplain mitigation site would therefore require monitoring. Andrew O'Sullivan asked for more details about invasive species monitoring requirements, and if a monitoring component would be required for any site chosen. L. Sommer responded that the monitoring requirement would be established in a permit, likely for any site chosen.

M. Hicks recommended that if a mitigation parcel is chosen within an existing floodplain area, strong justification for choosing the site would be required including a hydraulic analysis, which should include water table considerations.

P. Walker mentioned that NHDOT is considering forming an advisory group for the project. Lori Sommer offered to participate if this group is formed.

This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.

Springfield, #20509 (X-A002(078))
John Byatt gave an overview of the project which involves the replacement of twin 5' diameter corrugated metal pipes carrying Star Lake Outlet (Otter Brook) under George's Mills Road in Springfield. Construction is complicated by the fact that the pipes cross the intersection with Fisher Corner Road and Stryker Road diagonally. Additionally, businesses located on Fisher Corner Road to the south of the project area require large logging trucks to use the intersection frequently throughout the day. The pipes are constructed with masonry headwalls and are considered to be a bridge (#091/048). The existing condition is poor due to deterioration of the pipes, as well as inadequate hydraulic capacity. The Star Lake Outlet is a Tier 3 stream with a contributing watershed of 2,240 acres, a 25' bankfull width and a suggested stream crossing rules compliant size full span structure of 31'.

Melilotus Dube noted that extensive coordination with the public has occurred and a draft Programmatic Categorical Exclusion has been prepared, however, this will be updated simultaneous with the NHDES Wetlands Bureau permitting process. Relevant natural resources in the area that may be impacted by the project include water quality, federally threatened northern long-eared bat (NLEB) and wetlands/stream impacts affiliated with Star Lake Outlet. The proposed work will increase the impervious surface area in the vicinity of Star Lake Outlet, which is a pH impaired water body. A 180' permanent stormwater treatment swale will be installed in the southwest quadrant of the project area. At this time, there are no adverse impacts to NLEB anticipated with the use of a time-of-year restriction on tree clearing. Impacts to the banks and channel of Star Lake Outlet, and other delineated wetlands, will be permitted appropriately.

J. Byatt provided a summary of the design alternatives that were evaluated. Replacement options included a 20' precast concrete box culvert, a 31' precast concrete rigid frame bridge and a 31' solid precast concrete slab bridge. The 20' concrete culvert is the preferred option due to cost, constructability and public input. The 20' concrete culvert would cost approximately $480,000 less than the next most cost effective option, the rigid frame bridge. Traffic control was a large consideration in analysis of the alternatives. Temporary widening to accommodate traffic flow during construction would have presented significantly increased wetland and stream impacts and posed serious safety concerns for large trucks whereas a road closure would allow for a smaller project footprint and less disturbance. The Town agreed to a road closure with the stipulation that the closure be as short in duration as possible in order to minimize the impact to the public. The 20' culvert allows for the shortest closure, approximately 3 weeks. However, the Department acknowledges that the culvert would not meet criteria of the NHDES Wetlands Bureau stream crossing rules and would require an Alternative Design as part of the Standard Dredge and Fill application package. The 20' culvert would not allow for banks to be constructed inside the structure, however, it would be buried with simulated stream bed material placed inside and at the inlet and outlet. Additionally, the 20' culvert would meet NHDOT hydraulic criteria, which would be an improvement over the existing condition.

J. Byatt summarized the proposed preliminary wetland impacts associated with the 20' concrete box. Permanent wetland impacts would include 2,418 sf and temporary wetland impacts would include 1,370 sf. These impacts include 157 lf impact to the stream along both banks and the centerline of the stream channel. M. Dube pointed out the impacts shown on the wetland plan and noted that there may be a small area of additional impact to a delineated wetland to the west of Star Lake Outlet associated with the proposed replacement of a pipe which would carry the water from the stormwater treatment swale under Georges Mills Road. These impact calculations are preliminary and may change slightly as the design is refined during development of the application package.

Carol Henderson, NHFG, asked how deep the 20' culvert would be buried, and J. Byatt responded that it would be buried 4' deep to allow for a 1' thick concrete bottom and adequate layers of riprap and streambed simulation material. Karl Benedict, NHDES Wetlands Bureau, asked if existing and proposed stream velocities through the structure were calculated and if there would be potential impact to aquatic organism passage. J. Byatt replied that although the numbers were not available at the meeting, a hydraulic analysis

was performed including velocities which would be used to size the riprap needed to protect the structure. J. Byatt also noted that the proposed velocities would be lower due to the significantly increased size of the hydraulic opening. K. Benedict indicated that a discussion on existing and proposed velocities at the crossing and the corresponding implications for aquatic organism passage associated with the 20' box culvert would be required as part of the Alternative Design form in the wetland application package. General discussion as to whether the project should be reviewed at another Natural Resource Agency Meeting to verify the hydraulic analysis and velocities occurred, however, K. Benedict suggested that this information could be reviewed via email for pre-approval prior to submission of the full wetland application instead and all in attendance were in agreement. This submission will include a draft of the Alternative Design form, including discussion of hydraulics and velocities from the TS&L study, and minutes from meetings with the Town. The intention of this additional coordination is to seek feedback from DES Wetlands Bureau to allow as complete a Standard Dredge and Fill application package as possible in order to meet project timelines.

Lori Sommer, NHDES Wetlands Bureau, inquired if alternative methods for a terrestrial wildlife crossing had been evaluated since banks could not be constructed inside the 20' culvert alternative, such as replacing either of the existing culverts to the east or west of the crossing with a 4' diameter culvert. Kristin Hayden indicated that a 4' diameter culvert would not fit well as the surrounding area is fairly flat and does not have substantial cover to accommodate an increase in pipe diameter.

L. Sommer asked if the Department intends to pay into the ARM fund to mitigate for wetland and stream impacts. M. Dube confirmed that mitigation for the linear feet of impact to the stream would be required but that the square feet of impact to delineated wetlands is under the 10,000 square foot threshold and would not require mitigation. A preliminary calculation of the ARM fee indicates that mitigation for stream could be approximately $41,000. M. Urban suggested that because simulated stream bed material will be installed for the length of disturbance in the channel at the inlet and outlet that this could be considered self-mitigating and that only the lengths of impacts along each bank should be calculated for the ARM payment. There was general agreement, and this will be confirmed with final numbers via email prior to application submission.

This project has not been previously discussed at a Monthly Natural Resource Agency Coordination Meeting.

Columbia-Colebrook, #42313 (X-A004(814))

Chris Fournier (HEB Engineers) and Sarah Barnum (Normandeau Associates) presented the bridge project consisting of bridge preservation at two locations, Columbia Bridge #108/167, US Route 3 over Simms Stream and Colebrook Bridge #051/098, NH Route 26 over the Mohawk River. The project was previously present at the June 18, 2019 meeting. Since that meeting, the survey, delineation, H&H assessment were completed and impact areas determined.

C. Fournier began by providing and overview of the Columbia location, reiterating the purpose and need to address deterioration and stabilize the bridge structures.
Columbia Location

C. Fournier presented photographs of the existing conditions, specifically identifying the failure of the existing channel protection (riprap), which is sloughing into the channel and opening a void within the spill-through abutments.

Three alternatives were reviewed: do nothing, preserve, or replace. Do nothing does not meet the purpose and need, and replacement exceeds the need, therefore preservation is the preferred option.

C. Fournier review the proposed scope of work including traffic control, "peel and patch" of the bridge deck, sealing substructure, and reconstructing the channel protection. Detail was provided regarding the necessary channel work. To key the channel protection and keep it in place, the banks and entire channel bed under the bridge will be disturbed; riprap will be removed, existing channel materials will be excavated and stockpiled, and then reinstalled at essentially the same elevation and slope as the existing riverbed, on of top of the stabilized channel. Prior to removing and stockpile the existing riverbed material, the existing configuration of materials will be noted, and replacement will mimic that to the extent practicable. A phased "half and half" approach will be used to maintain flows, via water diversion, throughout the construction period. Because the impacted areas will be reconstructed to resemble the existing conditions, no mitigation is proposed. Due to the reconstruction of the channel, a standard NHDES Wetlands Permit Application (NHDES-W-06-012) will be required for this portion of the project.
S. Barnum briefly reviewed the environmental findings. Wetland delineation revealed no wetland resources except for the stream itself and associated banks. The NH NHB data check revealed no rare species or communities within the project footprint, and a survey of the bridge itself revealed no suitable features for roosting by Northern Long Eared Bats (NLEBs). In the vicinity, there are records of Northern Harrier (NOHA) and Round Whitefish from adjacent fields and the confluence of Simms stream and the Connecticut River, respectively. Following BMPs recommended by NHFG will prevent impacts due to construction from occurring to these nearby species.

S. Barnum also noted the existing topography adjacent to and under the bridge provides a suitable pathway for medium- and smaller-sized wildlife to use the bridge for passage under the roadway.
Colebrook Location

C. Fournier presented photographs of the existing conditions, specifically identifying the channel characteristics and deterioration of the center construction joint.

C. Fournier reviewed three alternatives: do nothing, preserve, or replace. Do nothing does not meet the purpose and need, and replacement exceeds the need, therefore preservation is the preferred option.
C. Fournier then described the proposed scope of work including traffic control, "peel and patch" of the bridge deck, sealing substructure, and fully reconstructing the construction joint. This requires under-bridge scaffolding. Access will be from the north due to the configuration of the ROW to the south. Minimal, temporary impacts to the channel and banks will occur due to the access and placing the needed scaffolding in the stream bed, and no mitigation is proposed. It was proposed that the project would be submitted through the new Permit by Notification for Tier 3 bridge repairs (Env-Wt 904.09), as was recommended by NHDES during the June 2019 meeting.

Karl Benedict stated that a Routine Roadway Routine Roadway Maintenance Activities Notification (RR-9) was also applicable to this portion of the project.

S. Barnum briefly reviewed the environment findings. Wetland delineation revealed no wetland resources except for the stream itself and associated banks. The NH NHB data check revealed no rare species or communities within the project footprint, and a survey of the bridge itself revealed no suitable features for roosting by NLEBs. In the vicinity, there is a Round Whitefish record from the area below the confluence of the Mohawk River and the Connecticut River. Following BMPs recommended by NHFG will prevent impacts due to construction from occurring to this nearby species.

The overall project schedule was presented, with intended submission of necessary NHDES applications in February and a Final Environmental Document in March.

This project has been previously discussed at the 6/19/2019 Monthly Natural Resource Agency Coordination Meeting.

Seabrook-Hampton, #15904 (X-A001(026))

The third Natural Resources Agency Coordination Meeting for the Hampton Harbor Bridge Project was held on December 18, 2019 at the offices of the New Hampshire Department of Transportation (NHDOT) in Concord, NH. Jennifer Reczek, NHDOT's Project Manager, opened the meeting by welcoming attendees, facilitating introductions, and outlining the agenda for the meeting. Ms. Reczek also discussed the project status, including the major work completed since the last presentation in January 2019. She explained that a Rehabilitation Study, as well as an Alignment and Profile Study, had been undertaken. She said the public expressed a preference for the western alignment at the January Public Information Meeting.

Dan Hageman with Fitzgerald & Halliday (FHI), a member of the HDR consultant team, then provided a summary of the agency coordination that has taken place since the last presentation in January 2019. The NHDOT met with the US Fish and Wildlife Service (USFWS) and New Hampshire Fish and Game (NHFG) on March 21st, 2019 to discuss federally-listed avian species, especially the Piping Plover. The time-of-year (TOY) restriction (April 1- August 31) and buffer (200-meters) was discussed at this meeting, as well as the Section 7 process. The 200-meter buffer restricts a large portion of the bridge structure. Mr. Hageman explained that the TOY and buffer restrictions could potentially increase the project duration from three to seven years. Formal consultation is likely and the Biological Assessment (BA) is underway. Through coordination with the NHFG, it was determined that the potential softshell clam beds, thought to exist to the west of the bridge in shallow waters, no longer exist due to shifting sediments and storm damage.

Mr. Hageman then explained that the NHDOT also conducted coordination with the New Hampshire Natural Heritage Bureau to confirm the listed plant species and population boundaries. Last summer, some of the listed species within the ROW were relocated by Alyson Eberhardt with the New Hampshire Sea Grant to allow the US Army Corps of Engineers (USACE) temporary access to the beach on the west side of the bridge for the dredging project. Coordination is ongoing with NHNHB to determine what species were relocated and to where. Coordination took place with the National Oceanic and Atmospheric Administration (NOAA) regarding listed aquatic species. Due to the potential presence of listed aquatic species and NOAA Trust Resources, in-water work is restricted by NOAA between March 16 and November 14. A Programmatic Biological Assessment is potentially feasible, depending on the construction methodology. It was also determined that a Programmatic Essential Fish Habitat (EFH) Assessment may not be feasible. Mr. Hageman explained that FHI field-delineated a blue mussel bed located near the northern abutment in support of the EFH Assessment. NOAA has indicated that sediment sampling will not be required in support of the BA and EFH, but that benthic sampling will be necessary. This is likely to be undertaken in early 2020.

Stephanie Dyer-Carroll, a member of the HDR consultant team, then discussed the cultural resources coordination that has taken place since the last presentation in January 2019. The NHDOT undertook a site walk with NHDHR and consulting parties in January 2019 and attended a Cultural Resources Coordination Meeting in February 2019. The NHDOT also completed and submitted five Individual Inventory Forms and one District Area Form in the winter 2019. At the request of the New Hampshire Division of Historical Resources (NHDHR), the NHDOT completed an additional three Individual Inventory Forms, an addendum to the Phase 1A Archaeological Assessment, and a Phase 1B Archaeological Survey for features under the south end of the bridge. Effects evaluations for the Neil R. Underwood Bridge (Hampton Harbor Bridge), the Hampton Beach Cottages District, and 54 River Street were submitted to NHDHR and consulting parties for their review and comments have been received. These historic properties are also subject to Section 4(f).

Ms. Dyer-Carroll explained that NHDOT has also coordinated with the New Hampshire Division of Parks & Recreation regarding 6(f) resources, specifically, the Hampton Beach State Park. It was suggested that

the NHDOT minimize 6(f) conversion of the State Park, if feasible, and that the NHDOT further investigate the limits of the right-of-way (ROW). Ms. Dyer-Carroll said that no impacts are anticipated to Harborside Park as a result of any of the alternatives.

John Stockton with HDR then discussed the coordination that has taken place with the US Army Corps of Engineers (USACE) and the US Coast Guard (USCG) since the last presentation. The USACE requested that all bridge alternatives have a vertical under-clearance of 48 feet to facilitate dredge vessels and equipment. Since the last presentation, the western replacement alignments have been shifted closer to the existing bridge to minimize potential impacts to the federal channel to the west. The USCG and NHDOT met with stakeholders to review the proposed navigational clearances. The USCG is currently reviewing the Draft Navigational Study to prepare a Navigational Determination.

Mr. Stockton went on to discuss the four alternatives under consideration. He said the Rehabilitated Bridge (with Widened Bridge) Alternative would widen the bridge to the east in order to maintain the existing operator's house. A temporary bridge would be required to the west to accommodate traffic during construction. Mr. Stockton explained that both the Replacement with Fixed and Replacement with Bascule Alternatives have been pulled in closer to the existing bridge to minimize impacts to the navigational channels, but that there would still be a slight impact to the Hampton Harbor Channel under the Replacement with Bascule Bridge Alternative. Ms. Reczek said that they'd learned through coordination with USACE that the limits of the channel were defined based on an underwater rock ledge. Mr. Stockton said that the Replacement with Bascule Bridge Alternative would increase the vertical under-clearance to 34 feet, and the channel width would be increased to 80 feet. This would allow for passage of the Currituck, the USACE dredge vessel. Mr. Stockton said the increase in profile would reduce the number of lifts required by 50 percent. He explained that the horizontal clearance would be greater with the Replacement with Fixed Bridge because the spans could be longer and that the entrance channel would be widened to 150 feet. He said the vertical under-clearance had been increased from 44 to 48 feet based on input received from USACE. Finally, Mr. Stockton described the Twin Bridge (with Rehabilitated Existing Bridge) Alternative which had been developed since the last meeting. The Twin Bridge Alternative would consist of rehabilitation of the existing bridge to carry only northbound traffic, and the construction of a new bascule bridge to the west which would carry southbound traffic. Ms. Reczek explained that the Twin Bridge Alternative would allow for more of the existing bridge to be maintained. Mr. Stockton said, however, that the superstructure would need to be replaced. Ms. Reczek said that it could be more challenging for boats to pass under the longer channel under the two bridges because of strong cross-currents.

Ms. Dyer-Carroll then began a comparison of the alternatives. She said that all the alternatives would have a potential adverse effect on the National Register-eligible bridge, they all could require the potential use of the Hampton Beach State Park and other Section 4(f) resources, and they could all require the conversion of a portion of the park under Section 6(f). Moreover, all the alternatives could potentially result in a Not Likely to Adversely Affect finding to listed aquatic species and a No Substantial Adverse Effect finding to EFH species if work is undertaken outside the time of year restriction. Finally, all the alternatives could potentially result in an adverse effect to listed avian species if work occurs within the TOY restriction.

Mr. Hageman continued the discussion, focusing on those places where the alternatives differ. He explained that the Rehabilitation (with Widened Bridge) would have the greatest temporary impacts due to the footprint of the temporary bridge, and that the Twin Bridge Alternative would have the least temporary impact because the new bridge would be narrower than the two replacement alternatives. He said the Rehabilitation (with Widened Bridge) would have the smallest overall footprint and the Twin Bridge Alternative would have the greatest overall footprint. Mr. Hageman then discussed the differences in temporary and permanent impacts to different resources including channel bottom habitat, listed plant species/dune habitat, EFH species, and potential impacts to Piping Plover habitat. Regarding navigability, Mr. Stockton stated that the underclearance would stay the same under the two rehabilitation alternatives, but that the vertical clearance would be increased to 34 feet with the Replacement with Bascule Bridge

Alternative, and 48 feet with the Replacement with Fixed Bridge Alternative. Additionally, under the two rehabilitation alternatives, the width of the navigational channel would remain the same. Under the Replacement with Bascule Bridge Alternative, the channel would be widened to 80 feet; under the Replacement with Fixed Bridge Alternative it would be widened to 150 feet.

Ms. Reczek then wrapped up the presentation by discussing the next steps in the project schedule. During the winter of 2019/2020, the NHDOT expects to: undertake benthic sampling and sediment sampling (if required); release the Type, Size and Location (TS&L) Study; hold both a PAC meeting and a public informational meeting; and prepare and submit the BAs and the EFH Assessment. During the Spring/Summer of 2020, the NHDOT expects to execute the Effects Memorandum for cultural resources; release the Draft Environmental Assessment; and hold additional PAC and public meetings.

Mike Hicks with USACE asked when the USCG would complete their Navigational Determination. Jeff Stieb said the USCG plans to have a letter finalized by February 2020. He also said they don't permit submarine cables. Mr. Hicks said USACE will ask the applicant to look at alternatives to the submarine cables. With the activity in the channel, the installation of cables could be very challenging. Mr. Hicks then asked if they'd included the cost of property takings in the estimates. Ms. Reczek said the impacts would primarily be within the ROW or to state lands. Mr. Hicks said that the USACE point-of-contact for Section 408 and navigation items is Wendy Gendron

Carol Henderson with NHFG requested the NHDOT summarize the rational for abandoning the alternative alignments to the east of the existing bridge. Ms. Reczek explained that the western alignment avoids impacts to the homes southeast of the bridge. Susi von Oettingen with the USFWS pointed out that there is no foraging or nesting habitat on the east, only on the west side. Mr. Hageman said the replacement alternatives could allow for the restoration of Piping Plover habitat in the footprint of the existing bridge. Ms. Henderson said it would be beneficial to include an eastern alignment in the alternatives matrix for comparison purposes.

Amy Lamb, with the New Hampshire Natural Heritage Bureau (NHNHB), asked if NHDOT could send the agencies a copy of the alternatives matrix along with any supporting graphics that show the potential impacts of each alternative. NHDOT agreed to send this information. Ms. von Oettingen asked why the NOAA TOY restriction is given more consideration than the USFWS TOY restriction. Ms. Reczek explained that work can often be undertaken during the NOAA TOY restriction with the use of sheet piling. This is not typically the case with the Piping Plover. Lori Sommer with the NH Department of Environmental Services (NHDES) asked if there would be a difference in impact to the Piping Plover between the three-year and seven-year scenarios. Ms. von Oettingen said there would be a loss in productivity and that the USFWS would consider each year of construction within Piping Plover habitat, during the TOY restriction, to constitute the "taking" of one pair of Piping Plover. It may not be a permanent loss, but it would constitute an adverse effect or take. Ms. von Oettingen said there needs to be formal consultation with the USFWS. There must be an inventory of habitat and an assessment of long-term effects to the Piping Plovers. Mr. Hicks asked what the TOY restriction is for the Piping Plover, and Ms. von Oettingen answered from April 1st to August 31st. Ms. von Oettingen then asked if the construction could start at the northern portion of the site, and move south to minimize work near the Plover habitat. Mr. Hicks asked if the birds could be relocated and Ms. von Oettingen answered that they cannot be relocated since they will come right back to the site.

Ms. Sommer asked if the vertical clearance increase is beneficial and how this factors into the project. Would bigger boats be able to enter the harbor? Ms. Reczek responded that the existing channel has an eight-foot design depth, so even if the channel or bridge openings were widened, the channel depth would still be the limiting factor for large vessels. As a result, the NHDOT does not anticipate a substantial change in the size of vessels entering the harbor. She said several party boats dock in the harbor and aren't able to

leave the harbor until high tide. Mr. Stockton said mooring locations also restrict the size of boats entering the harbor.

This project has been previously discussed at the 8/15/2018 and 1/16/2019 Monthly Natural Resource Agency Coordination Meetings.